| | Application No. | Applicant(s) |
| :---: | :--- | :--- |
| **_Notice of Allowability_** | 10/023,378 | HOLTZ ET AL. |
| | **Examiner** | **Art Unit** | |
| | Chih-Ching Chow | 2191 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--*

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *6/15/06*.

2. ☒ The allowed claim(s) is/are *1, 9-11, 19-21, 29 and 30*.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All    b) ☐ Some*    c) ☐ None   of the:

       1. ☐ Certified copies of the priority documents have been received.

       2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

       3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

    * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.

    (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached

       1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____ .

    (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of
Paper No./Mail Date _____ .

**Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)

3. ☒ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date *4/16/04, 6/16/06*

4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application

6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date *8/31/06* .

7. ☒ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____ .

## Examiner's Amendment and Statement of Reasons for Allowance

1.      This action is responsive to Applicant's amendment filed on June 15/2006.

### Examiner's Amendment

2.      An examiner's amendment to the record appears below. Should the changes and/or

additions be unacceptable to applicant, an amendment may be filed as provided by 37

CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no

later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview

with Mr. Wesley Ferrebee, Registration Number 51,312, on August 25, 2005 for

obviating any potential 101 issues and put the claims in condition for allowance.

The claims are amended as following:

1.      (Currently Amended)  A computer-implemented method for processing

conflicts in a first and second file tree comprising:

presenting one or more conflicts to a user;

presenting more than one unresolved independent conflicts as a single conflict to

said user, wherein said more than one unresolved independent conflicts are file tree

conflicts determined from a comparison of the first and second file trees;

obtaining input from said user; and

handling said one or more conflicts and said single conflict based on said input,

wherein one or more winning conflicts are applied to a file tree with which they were in

conflict, and wherein

if said winning conflicts are server operations, said server operations are translated back up a conflict list across previous server operations, and then down a conflict list across client operations, wherein the translation is one of a rename or a reparent of an object of said winning operation and said winning operation is changed to refer to said object using its new lineage, and

if said winning conflicts are client operations, said client operations are translated back up a conflict list across previous client operations, and then down the conflict list across server operations, wherein the translation is one of a rename or a reparent of an object of said winning operation and said winning operation is changed to refer to said object using its new lineage.

2-8.    (Canceled)

9.    (Previously Presented)  The method of claim 1 wherein said winning server operations are en-queued for transmission to the client.

10.    (Previously Presented)  The method of claim 1 wherein said winning client operations are applied against said server's filesystem.

11.    (Currently Amended)  An article of manufacture comprising:

a computer ~~useable~~ storage medium having computer readable program code embodied therein for processing conflicts in a first and second file tree, said computer readable program code in said article of manufacture comprising:

computer readable program code configured to cause said computer to present one or more conflicts to a user;

computer readable program code configured to cause said computer to present more than one unresolved independent conflicts as a single conflict to said user, wherein

said more than one unresolved independent conflicts are file tree conflicts determined from a comparison of the first and second file trees;

computer readable program code configured to cause said computer to obtain input from said user; and

computer readable program code configured to cause said computer to handle said one or more conflicts and said single conflict based on said input, wherein one or more winning conflicts are applied to a file tree with which they were in conflict, and wherein

if said winning conflicts are server operations, said server operations are translated back up a conflict list across previous server operations, and then down a conflict list across client operations, wherein the translation is one of a rename or a reparent of an object of said winning operation and said winning operation is changed to refer to said object using its new lineage, and

if said winning conflicts are client operations, said client operations are translated back up a conflict list across previous client operations, and then down the conflict list across server operations, wherein the translation is one of a rename or a reparent of an object of said winning operation and said winning operation is changed to refer to said object using its new lineage.

12-18. (Canceled)

19. (Previously Presented) The article of manufacture of claim 11 wherein said winning server operations are en-queued for transmission to the client.

20. (Previously Presented) The article of manufacture of claim 11 wherein said winning client operations are applied against said server's filesystem.

21. (Currently Amended) A computer program product comprising:

a computer ~~useable~~ <u>storage</u> medium having computer readable program code embodied therein configured to process conflicts in a first and second file tree, said computer program product comprising:

computer readable code configured therein to cause a computer to present one or more conflicts to a user;

computer readable code configured therein to cause a computer to present more than one unresolved independent conflicts as a single conflict to said user, wherein said more than one unresolved independent conflicts are file tree conflicts determined from a comparison of the first and second file trees;

computer readable code configured therein to cause a computer to obtain input from said user; and

computer readable code configured therein to cause a computer to handle said one or more conflicts and said single conflict based on said input, wherein one or more winning conflicts are applied to a file tree with which they were in conflict, and wherein

if said winning conflicts are server operations, said server operations are translated back up a conflict list across previous server operations, and then down a conflict list across client operations<u>, wherein the translation is one of a rename or a reparent of an object of said winning operation and said winning operation is changed to refer to said object using its new lineage</u>, and

if said winning conflicts are client operations, said client operations are translated back up a conflict list across previous client operations, and then down the conflict list across server operations<u>, wherein the translation is one of a rename or a reparent of an object of said winning operation and said winning operation is changed to refer to said object using its new lineage</u>.

22-28.  (Canceled)

29.     (Previously Presented)   The computer program product of claim 21 wherein said winning server operations are en-queued for transmission to the client.

30.     (Previously Presented)   The computer program product of claim 21 wherein said winning client operations are applied against said server's filesystem.

-- End --

## Examiner's Statement of Reason(s) for Allowance

3.      Claims 1, 9, 10, 11, 19, 20, 21, 29, and 30 are allowed.

4.      The following is an examiner's statement of reasons for allowance:

The prior arts of record: **Beizer** et al., teaches a method and system for automatically resolving data conflicts in a shared data environment where a plurality of users can concurrently access at least portions of a master data file is presented. Users process data files by means of local copies of a master data file. When an attempted update of a master data file with an edited data file from a user is detected, the updating file is analyzed to determine if any changes made are in conflict with changes made to the master data file by a second user. **Neeman** et al., teaches a replication facility provides for the replication of files or portions of files in a distributed environment. The replication facility is able to replicate any subtree within a distributed namespace of the distributed environment. New arts made of record: '**SUN Work Shop Team Ware: Users Guide**', teaches a concurrent development model called *Copy-Modify-Merge*. Isolated (per developer) workspaces form the *TeamWare* model. A workspace is a specially designated UNIX directory and its subdirectories. With *TeamWare*, you *copy* source from a central workspace into your own workspace, *modify* the source, and *merge* your changes with changes made by other developers in the central workspace; *TeamWare* enables you to easily and intelligently copy files between workspaces and then merge changes that exist between corresponding files.'; and '**Unison File Synchronizer**', teaches a file-synchronization tool for Unix and Windows. However, none of them, taken alone or in combination, teaches handling one or more conflicts and said single conflict based on said input, wherein one or more winning conflicts are applied to a file tree with which they were in conflict, and wherein if said winning conflicts are server operations, said server operations are translated back up a conflict list across previous server operations, and then down a conflict list across client operations, wherein the translation is one of a
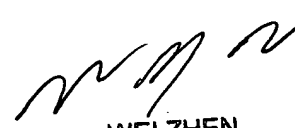
rename or a reparent of an object of said winning operation and said winning operation is changed to refer to said object using its new lineage, and if said winning conflicts are client operations, said client operations are translated back up a conflict list across previous client operations, and then down the conflict list across server operations, wherein the translation is one of a rename or a reparent of an object of said winning operation and said winning operation is changed to refer to said object using its new lineage, in such a manner as recited in claims 1, 11, and 21.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

5.      Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chih-Ching Chow whose telephone number is 571-272-3693. The examiner can normally be reached on 7:00am - 3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wei Zhen can be reached on 571-272-3708. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chih-Ching Chow
Examiner
Art Unit 2191

WEI ZHEN          September 25, 2006
SUPERVISORY PATENT EXAMINER